

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at line 19 of page 9 as originally filed with the following:

Referring now to the exemplary drawings, which illustrate, by way of example only, embodiments of the present invention, the present invention is generally embodied in a structure and method for forming that structure that includes a relatively flexible core through which extends an optical fiber. A series of reinforcing and protection layers are further ~~would~~ wound around the core-, one layer of which includes windings of an optical fiber in which are formed one or more gratings, such as long period or Bragg gratings. The entire structure may further be surrounded by an outer jacket. In some embodiments, the resulting cable-line structure may be extended through a protective cylinder formed from a material such as glass, metal, polymer or other material as needed to provide additional protection to the sensor of the present invention depending upon the environment in which the sensor is to be deployed.